## **REMARKS/ARGUMENTS**

The present paper is filed with a view to persuading the Examiner to reconsider and withdraw his objections with respect to the claims.

The Examiner has objected to claims 1 to 4 under 35 U.S.C. 103(a) as being unpatentable having regard to Lynn (US 5,856,640) in view of Gerber (US 3,842,941). In support of his rejection of claims 1 to 4, the Examiner states that Lynn ('640) teaches a method for testing an engine of a jet aircraft in a ground run-up enclosure (GRE), the jet having an elongate body defining an aircraft axis and the engine having an air inlet and exhaust outlet aligned substantially parallel to the aircraft, the GRE having a rear wall, a pair of side walls attached to the rear wall and an open front side opposite the rear wall, the method comprising moving the jet aircraft into the ground run up enclosure. The examiner states that it is inherent that the jet needs to be positioned inside the GRE by a known procedure and run its engine to full power to test its condition. The Examiner acknowledges that Lynn ('640) fails to disclose that "the jet aircraft is aligned with the aircraft axis substantially parallel to the actual wind direction and with the air inlet facing an actual wind direction. The Examiner then states Gerber teaches a method for testing an engine of a jet in a GRE comprising the step of aligning the jet with the aircraft axis substantially parallel to the actual wind direction and with the air inlet facing an actual wind direction. The Examiner states that it would be obvious to align the Lynn ('640) aircraft facing the actual wind direction as disclosed by Gerber because some engines are very sensitive in their reaction to side winds, these engines required very precise air pressure conditions that may not exist in the presence of side winds.

As stated in *United States Patent and Trademark Office, Manual of Patent Examining Procedure* at Chapter 7, page 45:

To establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. There must be also be a reasonable expectation of success. The prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

It is respectfully submitted that the combined teachings of both Gerber and Lynn ('640) do not disclose or even suggest the invention as defined in claim 1. Lynn ('640) discloses a conventional GRE in which a blast deflector screen is positioned in front of the rear wall of the enclosure. Gerber, on the other hand, does not disclose a conventional GRE. Rather, Gerber discloses a circular enclosure comprising a round turntable and a soundabsorbing roof structure. It is acknowledged that a jet aircraft may be brought into the Gerber enclosure and positioned on the turntable and may be rotated into alignment such that it may face the actual wind direction. However, to accommodate engine run-up, the Gerber enclosure requires the presence of the additional feature of having side walls of the enclosure being comprised of removable, rotatable screens (see reference number 6 in Gerber). These screens must be rotatably disposed so that they can be aligned in the direction of the wind (see Gerber column 2 line 17). Thus, to achieve the function of being able to align the aircraft such that it faces actual wind direction in Gerber, both the aircraft and the rotatable screens must be aligned with the wind. If Gerber was combined with Lynn ('640), this would result in a ground run-up enclosure in which not only the aircraft, but also the enclosure itself must be lined up to face the direction of the wind. The method of claim 1 provides for a step of aligning the aircraft axis substantially parallel to the actual wind direction and with the air inlet of the engine facing the actual wind direction without the necessity of having to align the enclosure as well. The method of claim 1 is neither taught nor contemplated by the combined teachings of Gerber and Lynn ('640). As such, it is improper to combine these references to reject claim 1 under 35 U.S.C. 103(a). Thus claim 1 is allowable and the applicant respectfully requests that the objection to claim 1 be withdrawn.

Claims 2 to 4 depend from claim 1. In light of the comments above, wherein the applicant submits that claim 1 is allowable, it is respectfully submitted that claims 2 to 4 should also be allowable.

The examiner has objected to claims 5 to 16 under 35 U.S.C. 103(a) as being unpatentable having regard to Lynn ('640) in view of Lynn (US 5,127,609). The Examiner states that Lynn ('640) teaches a GRE, but fails to disclose that the side walls and rear wall each have an inner face sloped downwardly and inwardly so as to form an oblique angle with the ground and are so constructed to withstand a blast from a jet engine. Lynn ('640) includes a single blast deflector screen positioned in front of the rear wall behind the aircraft. Lynn

('609) discloses the structure of a jet blast deflector fence to be placed behind an aircraft which has a face sloped downwardly and inwardly so as to form an oblique angle with the ground.

A feature of the GRE as defined in claim 5 (and dependent claims 6 to 16) is that the rear wall and the side walls all have a sloped structure so as to deflect the blast from a jet engine. This feature allows all portions of the side and rear walls to deflect the blast from the engines during run-up, thereby allowing alignment of the jet engine into various positions within the enclosure. The Examiner states that "it would have been obvious to a person with ordinary skill in the art to employ the Lynn ('609) oblique angle design with the Lynn ('640) GRE design because the oblique configuration would deflect the jet blast vertically and would increase the aerodynamic performance of the GRE". Both Lynn ('609) and Lynn ('640) disclose sloped blast deflectors. It is acknowledged that using the Lynn ('609) design in the Lynn ('640) GRE may increase performance in its design. However, there is no teaching or suggestion in either of the Lynn patents that the sloped design of a blast deflector screen should also be additionally used on the side walls of a GRE. The presence of the sloped design of the blast deflector on the side walls is only necessary if the aircraft were to be turned inside the enclosure with the jet engine aligned such that the jet blast would hit the side wall. This is not mentioned or even contemplated in either Lynn ('640) or Lynn ('609). As cited above in United States Patent and Trademark Office, Manual of Patent Examining Procedure at Chapter 7, page 45: " The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure (In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991))."

Since the feature of having the sloped design on the both the rear and side walls of the GRE is neither disclosed nor contemplated by the combined teachings of Lynn ('640) and Lynn (609) it is cannot be said that claim 5 would be obvious in light of the combined teachings of these patent. It appears that the only way in which the Examiner has come to invention of claim 5 in light of Lynn ('609) and Lynn ('640) is to use hindsight, gained from knowledge of the applicant's disclosure. Since doing so is explicitly prohibited for a rejection under 35 U.S.C. 103(a), the rejection of claim 5 under 35 U.S.C. 103(a) for obviousness in light of these combined teachings is improper and should thus be withdrawn.

Claims 6 to 16 depend from claim 5. Since claim 5 is should not be rejected for obviousness in light of Lynn ('640) in view of Lynn ('609) and is thus allowable, it is respectfully submitted that each of the claims from which it depends are also not obvious and thus should also be allowable. In fact, several of these dependent claims include further limitations which provide further support for these dependent claim not being considered obvious in light of Lynn ('640) and Lynn ('609) as will be discussed below.

With respect to claim 10, the Examiner states that Lynn ('609) teaches the added limitation of claim 10, namely the inner face of the walls forms an angle of about 105 to 135 degrees with the ground. As discussed above, there is no teaching or suggestion in either of the Lynn patents that the sloped design of a blast deflector screen should also be additionally used on the <u>side walls</u> of a GRE. The presence of the sloped design of the blast deflector on the side walls is only necessary if the aircraft were to be turned inside the enclosure with the jet engine aligned such that the jet blast would hit the side wall. This is not mentioned or even contemplated in either Lynn ('640) or Lynn ('609). As such, the invention of claim 10 with this added feature pertaining to the inner walls cannot be said to be obvious having regard to Lynn ('640) in view of Lynn ('609).

With respect to claim 15, the Examiner states that Lynn (609) teaches the feature that the rear wall enclosure has an arcuate inner face so as to upwardly direct the blast from the jet engine. In fact, Lynn (609) does not teach a rear wall of an enclosure but rather simply teaches a jet blast deflector fence having an arcuate inner face. It is not shown as part of an enclosure. Likewise, Lynn (640)'s rear wall does not per se have an arcuate inner face, rather a separate blast fence (see reference number 60 in Lynn ('640)) is positioned adjacent the rear wall within the closure. Since the features of claim 15 are not disclosed or contemplated by the prior either alone or in combination, it cannot be said that the invention of claim 1 would have been obvious having regard to the cited prior art and thus providing further reason for the objection thereto under 35 U.S.C.103(a) to be withdrawn.

With respect to claim 16, the Examiner states it would be obvious to combine Lynn ('640) with Lynn ('609) to teach the added feature of claim 16 that each of the side walls comprises a forward portion and a rearward portion through which the side wall is connected to the rear wall, the rearward portion of each side wall being connected to the forward portion of the side wall and the rear wall at oblique angles, and wherein the rear wall of the enclosure and

the rearward portions of the side walls each have an arcuate innerface so as to upwardly direct the blast from the jet engine. As discussed above, nowhere in the prior art is it disclosed or contemplated that the side walls (either the front or rear portion thereof) have the arcuate inner face to upwardly direct the blast from the jet engine. The presence of the arcuate inner face on the side walls (either the front or rear portion) is only necessary if the aircraft were to be turned inside the enclosure with the jet engine aligned such that the jet blast would hit the front or rear portion of the side wall. This is not mentioned or even contemplated in either Lynn ('640) or Lynn ('609). As such, the invention of claim 16 cannot be said to be obvious having regard to Lynn ('640) in view of Lynn (609), thereby providing further support for the submission that the rejection under 35 U.S.C. 103(a) be withdrawn.

The Examiner has objected to claims 17 and 18 under 35 U.S.C. 103(a) as being unpatentable over Lynn ('640) in view of Lynn ('609) and further in view of Gerber (US 3,821,941). Claims 17 and 18 depend from claim 5, respectively adding the limitations of the open front enclosure facing a prevailing wind direction (claim 17), and the open front of the enclosure facing a direction other than a prevailing wind direction (claim 18). The Examiner states that Lynn ('640) and ('609) teach the limitations discussed previously but fail to disclose "the open front of the enclosure faces a prevailing wind direction". The Examiner states that Gerber teaches a method for testing an engine of a jet aircraft in a GRE comprising a step of aligning the jet aircraft with the aircraft axis substantially parallel to the actual wind direction and with the air inlet of the engine facing an actual wind direction. The Examiner further states that it would have been obvious to a person with ordinary skill in the art to align the Lynn jet aircraft facing an actual wind direction, as disclosed by Gerber because some engines are very sensitive in their reaction to side winds, these engines require very precise air pressure conditions that may not exist in the presence of side winds and failure of the engines could occur.

It is respectfully submitted that the combined teachings of Gerber, Lynn ('640) and Lynn ('609) do not disclose or even suggest the invention as defined in claim 17 and 18. Lynn ('640) discloses a conventional ground run up enclosure in which a blast deflector screen is positioned in front of the <u>rear wall</u> of the enclosure. Gerber, on the other hand, does not disclose an open front GRE. Rather, Gerber discloses a circular enclosure comprising a round turntable and a sound-absorbing roof structure. It is acknowledged that a jet aircraft may be

brought into the Gerber enclosure and positioned on the turntable and may be rotated into alignment such that it may face the actual wind direction. However, to accommodate engine run-up, the Gerber enclosure requires the presence of the additional feature of having side walls of the enclosure being comprised of removable, rotatable screens (see reference number 6 in Gerber). These screens must be rotatably disposed so that they can be aligned in the direction of the wind (see column 2 line 17). Thus, to achieve the function of being able to align the aircraft such that it faces actual wind direction, in Gerber both the aircraft and the rotatable screens must be aligned with the wind. Because Gerber requires the presence of the alignable rotatable screens to allow the aircraft to be aligned with the wind direction, Gerber cannot be combined with the Lynn ('609) and Lynn ('640) to come to the invention of claim 17 or 18, or any workable product for that matter. It is difficult, if not impossible, to see how the alignable rotatable screens of Gerber and the oblique deflector fence of Lynn ('609) could be simultaneously utilized in the side and rear walls of the GRE of Lynn ('640). As there is no practical motivation to combine the teachings of these patents, it is improper to reject to reject claims 17 and 18 under 35 U.S.C. 103(a) on the basis set out by the examiner. As such, in addition to the comments above regarding the allowability of claim 5, from which claims 17 and 18 depend, it is respectfully submitted that the rejection to claims 17 and 18 under should be withdrawn.

In light of the comments submitted herein, Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted.

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